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EXAMINER

ZHU, BO HUI ALVIN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/783,572	Applicant(s) KUBLER ET AL.	
	Examiner BO HUI A. ZHU	Art Unit 2465	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 25 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-69 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-29, 31-49, 51-65 and 69 is/are rejected.
- 7) ☒ Claim(s) 30, 50 and 66 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 06/25/2010 has been entered.

No claims are amended.

Claims 22 - 69 are still pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22, 25-28, 31, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III et al (U.S Patent No. 5,734,981) in view of Sherif (U.S. Patent No. 5,459,722).

Regarding claim 22, Kennedy, III et al teach a device (18, FIG. 1) for communicatively coupling a packet network (16, FIG. 1) to at least one communication network (38, FIG. 1) having a different information format, the device comprising: a packet interface (160, FIG. 3) for communicating information via file packet network (column 4, lines 56-61); at least one network interface (170, FIG. 3), each of the at least one network interface for communicating information via an associated one of the at least one communication network in an associated format (column 11, lines 52-

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56); a converter (174, 176, Fig. 1) for converting information, a controller (18, FIG. 1) for receiving signaling information that initiates a call connection (column 11, lines 48-51, column 12, lines 50-54; column 13, lines 31 - 46).

Kennedy III et al. does not disclose the converter selectively converting information received by the packet interface for transmission via one of the at least one network interface in the associated format, and for selectively converting for transmission via the packet interface information received from the one of the at least one network interface in the associated format; and a controller for receiving from either of the packet network and the at least one network interface, signaling information that initiates a call connection between the packet network and one of the at least one communication network, the controller adapting the operation of a converter and establishing the call connection between the packet network and the one of the at least one communication network, based upon the received signaling information and a cross-reference between an address on the at least one communication network and an associated address on the packet network.

Sherif teaches a converter (Fig. 6, 232) for selectively converting information received by a packet interface (Fig. 6, 270) for transmission via one network interface (Fig. 6, 210) in the associated format (signals in PSTN format), and for selectively converting for transmission via the packet interface (Fig. 6, 270) information received from the one network interface (Fig. 6, 210) in the associated format (packets in ATM format) (column 4, line 37 - column 5, line 18 describes a two-way conversion process between ATM formatted packets and PSTN formatted signals); a controller (Fig. 6, 230)

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for receiving from either of the packet network and the at least one network interface, signaling information between the packet network (Fig. 6, 270) and one of the at least one communication network (Fig. 6, 210), the controller adapting the operation of the converter and establishing the call connection between the packet network and the one of the at least one communication network, based upon the received signaling information and a cross-reference between an address on the at least one communication network and an associated address on the packet network (column 4, line 37 - column 5, line 18 describes a two-way conversion process between ATM formatted packets and PSTN formatted signals; column 5, line 41 - 50 describes 230 converts the received signals based on a VPI/VCI to DLCI cross-reference).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kennedy III et al. to include the elements of the converter selectively converting information received by the packet interface for transmission via one of the at least one network interface in the associated format, and for selectively converting for transmission via the packet interface information received from the one of the at least one network interface in the associated format; and a controller for receiving from either of the packet network and the at least one network interface, signaling information that initiates a call connection between the packet network and one of the at least one communication network, the controller adapting the operation of a converter and establishing the call connection between the packet network and the one of the at least one communication network, based upon the received signaling information and a cross-reference between an address on the at

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least one communication network and an associated address on the packet network as shown in Sherif in order to allow for connectivity between the PSTN network and ATM networks.

Regarding claim 25, Kennedy, III et al teach the device of claim 22 wherein the information communicated via the packet interface comprises digitized voice information (column 11, lines 46 - 62).

Regarding claim 26, Kennedy, III et al teach the device of claim 25 wherein at least a portion of the information communicated via the packet interface is unrelated to the communication of digitized voice information (column 10, lines 46-55).

Regarding claim 27, Kennedy, III et al teach the device of claim 22 wherein the at least one network interface (170, FIG. 3) provides the functionality of a conventional telephone switching network interface (column 11, line 48).

Regarding claim 28, Kennedy, III et al teach the device of claim 27 wherein the at least one network interface provides at least one of a battery supply, over-voltage protection, ringing current, tone generation, tone detection, two wire to four wire conversion, and test functionality (262, 264, 265, FIG. 6, column 13, lines 6-12).

Regarding claim 31, Kennedy, III et al teach the device of claim 27 wherein the at least one network interface is a digital interface (column 11, lines 52-53, 170 comprises a modem and a DTMF coder/decoder).

Regarding claim 32, Kennedy, III does not teach the at least one network interface is a second packet interface.

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Sherif teaches a network interface that comprises a packet interface (Fig. 6, 230, 230 has a packet interface and a PSTN interface).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kennedy III et al. to include the elements of as shown in Sherif in order to allow for connectivity between the PSTN network and ATM networks.

Regarding claim 34, Kennedy, III et al in view of Sherif teaches the device of claim 22. However, Kennedy, III does not teach the converter adapts information received via the packet interface into analog modem signals for transmission via the at least one network interface and adapts analog modem signals received via the at least one network interface into information for transmission via the packet interface.

Official Notice is taken that the method of adapting information received via a packet interface into analog modem signals for transmission via the a network interface and adapting analog modem signals received via a network interface into information for transmission via a packet interface is well known in the art (for example, the use of a modem enables transmission of digitally encoded data over telephone lines in the form of analog signal).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kennedy III et al. to include the elements of the converter adapts information received via the packet interface into analog modem signals for transmission via the at least one network interface and adapts analog modem signals received via the at least one network interface into information for

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transmission via the packet interface for the purpose of enabling transmission of digitally encoded data over telephone lines.

4. Claims 23, 24, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III et al (U.S Patent No. 5,734,981) in view of Sherif (U.S. Patent No. 5,459,722) and further in view of Henley et al (U.S Patent No. 5,526,353).

Regarding claims 23 and 24, Kennedy III et al. in view of Sherif teaches the device of claim 22, respectively.

However, Kennedy, III et al fail to explicitly teach the packet interface is compliant with an Internet protocol (IP) and the Internet Protocol (IP) further comprises the transmission control protocol (TCP)/Internet protocol (IP).

Henley et al disclose a system and method for communication of audio data over a packet-based network. The teaching recite Transmission Control Protocol/Internet Protocol (TCP/IP) is one of the supported network and transport protocols (column 4, lines 6-7). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al make the packet interface compliant with IP and to include TCP/IP as a transport protocol in the call delivery system as taught by Henley et al. One is motivated as such to employ error and flow control in order to realize significant loss of throughput in packet retransmissions (column 4, lines 7-14).

Regarding claim 29, Kennedy, III et al in view of Sherif teach the device of claims 27.

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Kennedy, III et al however, fail to teach the at least one converter converts digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information.

Henley et al teach a system and method for communication of audio data over a packet-based network. The system according to the embodiment consist of a decompression/analog conversion circuit for converting a stream of digital audio data to analog audio signal (column 7, lines 27-31) and a digital compression circuit for converting analog audio signal into a stream of digital audio data (column 7, lines 19-21). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the at least one converter enabled the conversions of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information as taught by Henley et al. One is motivated as such to compensate for jitter in a computer network in order to provide high fidelity transmission of audio data through the network (column 4, lines 66-67).

Regarding claim 33, Kennedy, III et al in view of Sherif teach the device of claim 22.

However, Kennedy, III et al fail to teach the at least one converter compensates for a difference in bit rate between interfaces.

Henley et al teach a system and method for communication of audio data over a packet-based network. The system according to the embodiment consists of a decimation circuit adapted to detect when the buffer is too long and adjusts the buffer

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toward its predetermined length. This happens when the clock of a coder/decoder (CODEC) triggers too slowly or if the audio data are transmitted at an excessive rate through the LAN, thus data are read from the buffer slower than they are written to the buffer (column 5, lines 65-67, column 6, lines 1-8). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the at least one converter enabled the conversions of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information as taught by Henley et al. One is motivated as such to ensure the buffer stays close to its predetermined length for efficient realignment of audio data in the buffer (column 6, lines 11-14).

5. Claims 35, 38 – 41, 44 – 47, 51, 54 – 57 and 60 - 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III et al (U.S Patent No. 5,734,981) in view of Sherif (U.S. Patent No. 5,459,722).

Regarding claims 35 and 51, Kennedy, III et al teach a system and a method for communicatively coupling a packet network (16, FIG. 1) to at least one communication network (38, FIG. 1) having a different information format, the method comprising: receiving call setup information (call delivery information) from one of the packet network (16, FIG. 1) and the at least one communication network (column 3, lines 40-43); establishing an association between the packet network (16, FIG. 1) and

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one of the at least one communication network (38, FIG. 1) based upon the call setup information (column 8, lines 4-9).

Kennedy III et al. does not disclose at least one converter for selectively converting information received by the packet interface for transmission via one of the at least one network interface in the associated format, and for selectively converting for transmission via the packet interface information received from the one of the at least one network interface in the associated format; and a controller for receiving from either of the packet network and the at least one network interface, signaling information that initiates a call connection between the packet network and one of the at least one communication network, the controller adapting the operation of a converter and establishing the call connection between the packet network and the one of the at least one communication network, based upon the received signaling information and a cross-reference between an address on the at least one communication network and an associated address on the packet network.

Sherif teaches a converter (Fig. 1, 30 and 40) for selectively converting information received by a packet interface (Fig. 1, 70) for transmission via one network interface (Fig. 1, 10) in the associated format, and for selectively converting for transmission via the packet interface (Fig. 1, 70) information received from the one network interface (Fig. 1, 10) in the associated format; a controller (Fig. 6, 230) for receiving from either of the packet network and the at least one network interface, signaling information that initiates a call connection between the packet network and one of the at least one communication network, the controller adapting the operation of

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a converter and establishing the call connection between the packet network and the one of the at least one communication network, based upon the received signaling information and a cross-reference between an address on the at least one communication network and an associated address on the packet network (column 5, line 41 – 46)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kennedy III et al. to include the elements of at least one converter for selectively converting information received by the packet interface for transmission via one of the at least one network interface in the associated format, and for selectively converting for transmission via the packet interface information received from the one of the at least one network interface in the associated format; and a controller for receiving from either of the packet network and the at least one network interface, signaling information that initiates a call connection between the packet network and one of the at least one communication network, the controller adapting the operation of a converter and establishing the call connection between the packet network and the one of the at least one communication network, based upon the received signaling information and a cross-reference between an address on the at least one communication network and an associated address on the packet network as shown in Sherif in order to allow for connectivity between the PSTN network and ATM networks.

Regarding claims 38 and 54, Kennedy, II et al teach the method of claim 35 wherein the information communicated via the packet network comprises digitized voice information (column 11, lines 46 - 62).

Regarding claims 39 and 55, Kennedy, II et al teach the method of claim 35 wherein the information communicated via the packet network comprises data (column 10, lines 39- 44).

Regarding claims 40 and 56, Kennedy, II et al teach the method of claim 39 wherein at least a portion of the data is unrelated to the communicate of digitized voice information (column 10, lines 46-55).

Regarding claims 41 and 57, Kennedy, III does not teach the at least one network interface is a second packet interface.

Sherif teaches a network interface that comprises a packet interface (Fig. 6, 230, 230 has a packet interface and a PSTN interface).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kennedy III et al. to include the elements of as shown in Sherif in order to allow for connectivity between the PSTN network and ATM networks.

Regarding claims 44 and 60, Kennedy, II et al teach the method of claim 35 wherein the at least one communication network comprises a conventional telephone switching network (38, FIG. 1, column 6, lines 7-10).

Regarding claims 45 and 61, Kennedy, II et al teach the method of claim 44 wherein the second information format is an analog format (column 12, lines 55-56;

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PSTN 38 can include traditional landline telephone adapted to making analog phone calls - column 6, lines 8-9).

Regarding claims 46 and 62, Kennedy, III et al teach the method of claim 44 wherein one of the second information format is a modem signal (column 12, lines 39-42).

Regarding claims 47 and 63, Kennedy, III et al teach the method of claim 44 wherein the second information format is a digital format (column 6, lines 15-18; caller 40 can make calls from network 41, which can be a personal communication service (PCS) network supporting digital format).

6. Claims 36, 37, 42, 43, 48, 49, 52, 53, 58, 59, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III et al (U.S Patent No. 5,734,981) in view of Sherif (U.S. Patent No. 5,459,722) and further in view of Henley et al (U.S Patent No. 5,526,353).

Regarding claims 36, 37, 42, 43, 52, 53, 58 and 59, Kennedy, III et al teach the device of claims 35 and 51, respectively.

However, Kennedy, III et al fail to explicitly teach the packet interface is compliant with an Internet protocol (IP) and the Internet Protocol (IP) further comprises the transmission control protocol (TCP)/Internet protocol (IP).

Henley et al disclose a system and method for communication of audio data over a packet-based network. The teaching recite Transmission Control Protocol/Internet Protocol (TCP/IP) is one of the supported network and transport protocols (column 4,

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lines 6-7). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al make the packet interface compliant with IP and to include TCP/IP as a transport protocol in the call delivery system as taught by Henley et al. One is motivated as such to employ error and flow control in order to realize significant loss of throughput in packet retransmissions (column 4, lines 7-14).

Regarding claims 48 and 64, Kennedy, III et al teach the device of claims 35 and 51,

Kennedy, III et al however, fail to teach the at least one converter converts digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information.

Henley et al teach a system and method for communication of audio data over a packet-based network. The system according to the embodiment consist of a decompression/analog conversion circuit for converting a stream of digital audio data to analog audio signal (column 7, lines 27-31) and a digital compression circuit for converting analog audio signal into a stream of digital audio data (column 7, lines 19-21). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the at least one converter enabled the conversions of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information as taught by Henley et al. One is motivated as such to compensate for jitter in a computer network

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in order to provide high fidelity transmission of audio data through the network (column 4, lines 66-67).

Regarding claims 49 and 65, Kennedy, III et al teach the method of claims 35 and 41.

Kennedy, III et al fail to explicitly teach the transforming comprises converting an analog voice signal into digitized voice information.

Henley et al teach a system and method for communication of audio data over a packet-based network. The system according to the embodiment consists of a digital compression circuit for converting analog audio signal into a stream of digital audio data (column 7, lines 19-21). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the transformation of an analog voice signal to digitized voice information as taught by Henley et al. One is motivated as such to compensate for jitter in a computer network in order to provide high fidelity transmission of audio data through the network (column 4, lines 66-67).

7. Claims 67 - 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III et al (U.S Patent No. 5,734,981) in view of Sherif (U.S. Patent No. 5,459,722) and further in view of Bates et al. (US Patent No. 5,239,577).

Regarding claim s 67 – 69, Kennedy III et al. in view of Sherif discloses all the elements as discussed above.

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However, Kennedy III et al. does not disclose the address on the at least one communication network comprises a telephone number.

Bates et al. teaches a communication network comprises a telephone number (e.g. see column 7, line 44 – 64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kennedy III et al. to include the element of the address on the at least one communication network comprises a telephone number as shown in Bates et al. in order to allow communication using a telephone number.

Allowable Subject Matter

8. Claims 30, 50, and 66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicants' arguments with respect to claim 22 (Remarks, pages 16 - 24) have been fully considered but they are moot in view of the new ground of rejection.

10. Applicants' arguments with respect to claim 25 (Remarks, page 24) have been fully considered but they are moot in view of the new ground of rejection.

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11. Applicants' arguments with respect to claims 31, 32, and 34 (Remarks, pages 24 – 25) have been fully considered but they are moot in view of the new grounds of rejections.

12. Applicants' arguments with respect to claims 38 and 54 (Remarks, page 28) have been fully considered but they are moot in view of the new grounds of rejections.

13. Applicants' arguments with respect to claims 41 and 57 (Remarks, page 28 – 29) have been fully considered but they are moot in view of the new grounds of rejections.

14. Applicants' arguments with respect to claim 30 (Remarks, pages 26 – 27) are persuasive. The 103 rejection of claim 30 has been withdrawn.

15. Applicants' arguments with respect to claim 30 (Remarks, pages 26 – 27) are persuasive. This rejection has been withdrawn.

16. Applicants' arguments with respect to claims 50 and 66 (Remarks, pages 30 – 32) are persuasive. The 103 rejections of claims 50 and 66 have been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BO HUI A. ZHU whose telephone number is (571)-270-1086. The examiner can normally be reached on Mon-Thu 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. A. Z./
Examiner, Art Unit 2465

/Jayanti K. Patel/
Supervisory Patent Examiner, Art Unit 2465